



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/624,161

07/22/2003

Hsi-Hur Lai

6076

7590

11/30/2006

Hsi-Hur Lai
12315 Ashford Meadows Dr.
Sugar Land, TX 77478

EXAMINER

GUIDOTTI, LAURA COLE

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,161

Applicant(s)

LAI ET AL.

Examiner

Laura C. Guidotti

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 7-9 claim "an eraser circle fabric" of which the language is considered to be new matter, as this language is not supported by the original specification. In the original specification and disclosure there is a belt fabric (30) that serves as the erasing surface, however this fabric is not shaped as a "circle". It is believed that the Applicant may have intended that "the belt fabric" and "the eraser

circle fabric” to be equivalent structure. However, the language (“the eraser circle fabric”) that is now presently used claims structure that is not described in the specification and is considered to be new matter.

Claim 8 recites that the “...soft material pad ring is installed around the edge of said case in order to obtain the optimum vacuum force via said vacuum connector.” However, in the Applicant’s specification, the soft material pad ring (70) is stated to function only as to “avoid scratches on the surface of the blackboards”. It has not been presented in the original specification that the soft material pad ring is *to obtain the optimum vacuum force via said vacuum connector* and therefore is considered to be new matter.

Claim 9 claims “one set”, however this structure was not described in the specification and is now considered to be new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation “the center holes” in Line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation “said case holes” in Line 5. There is insufficient antecedent basis for this limitation in the claim. It appears rather than “said case holes” that the Applicant intended “said mounting holes” (“...on the said case sides...”) It is

Art Unit: 1744

noted however also that the limitation "the said case sides" in Line 2 also has insufficient antecedent basis for this limitation in the claim. Line 2 should instead read "...mounting holes on *sides of said case*..."

Claim 7 Lines 5-6, it is unclear as to whether an eraser circle fabric is itself connected to a vacuum case, as Lines 5-6 recite "...an eraser circle fabric and a vacuum connector which is connected to a vacuum device." It appears that there is a grammatical error causing confusion in these lines.

Claim 8 recites the limitation "the edge" in Line 2. There is insufficient antecedent basis for this limitation in the claim. It appears that the Applicant instead of "*the edge*" intended "*an edge*".

Claim 8 recites the limitation "the optimum vacuum force" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the front and back" in Lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9, it is unclear as to what is meant by "...said bracket *is to combine* said eraser circle fabric which is mounted on the said roller *and* said roller which is mounted on the front and back of the bracket into *one set*". This is unclear to the Examiner. What is "combined" and what is considered to be "one set"?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1744

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao, US 4,941,225, in view of Leary, US 1,552,713 and Chen, US 4,742,594.

Liao discloses the claimed invention including a rectangular box hollow case with mounting holes (11A, 11B) on the sides (10; see Figure 2), a scraper (35) that is “roughly” the same dimension as the case (Figures 2, 4) and is fastened on the bottom base of the case (Figures 2 and 5) to remove chalk powder from an eraser fabric (Column 2 Lines 66-68), two rollers (32), two shafts which are inserted into center holes of the rollers (33) and through the case holes (Column 2 Lines 38-39), a U-shaped bracket which is bolted to the case (31; it is generally U-shaped), an eraser circle fabric (the fabric belt, 36). Regarding claim 9, the bracket is capable to “combine” the eraser circle fabric that is mounted on the roller and the roller that is mounted on the front and back of the bracket into one set (as shown in Figures). Liao does not disclose a soft material pad ring, a vacuum connector that is connected to a vacuum source, or a brush.

Leary teaches an eraser structure comprising a hollow case (entire housing including 61, 47, 46) that has upper and lower ball seats (75) to hold a hose rotator or vacuum connector (76) that connects to a vacuum cleaner (74; Page 4 Lines 37-58) in order to carry away the dust from a chalkboard thereby allowing the cleaning operation

to be more sanitary by avoiding pollution of the air by chalk dust (Page 1 Lines 24-31).

There is a soft material pad ring installed around an edge of the case (30, 31).

Chen discloses the claimed invention including an eraser structure that includes a case (20, 30) in which are mounted brushes (brushes are mounted to 51, 52, 53, see Figure 4) that are overall roughly the same dimension as the case (see Figure 4) in order to scrape or remove chalk dust from an outer cyclical eraser fabric (Column 2 Lines 63-68).

It would have been obvious for one of ordinary skill in the art to modify the eraser structure of Liao by providing a vacuum connector connected to a vacuum device and a soft material pad ring, as Leary teaches, in order to provide a vacuuming or suction airstream that can carry away the dust from a chalkboard thereby allowing the cleaning operation to be more sanitary by avoiding pollution of the air by chalk dust and in order to provide a wiping surface to an outer boundary of the eraser device, and further it would have been obvious for one of ordinary skill in the art to substitute the scraper of the eraser structure of Liao for a brushing structure, as Chen teaches, as an alternative means capable of removing chalk dust from a cyclical eraser fabric that serves to remove chalk from a board.

Response to Arguments

5. Applicant's arguments with respect to claims 7-9 have been considered but are moot in view of the new ground(s) of rejection.

Also, in response to applicant's argument that the references (US 1,552,713; US 1,801,620; US 4,941,225; US 5,537,711; US 003/000042) fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the two rollers are lined up, oblong shaft holes, a spring, that the eraser can move in any direction without leaving any roller mark) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

6. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LCG
LCG


GLADYS J. P. CORCORAN
SUPERVISORY PATENT EXAMINER